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(21) International Application Number: PCT/US97/09673 (22) International Filing Date: 4 June 1997 (04.06.97) (30) Priority Data: 08/659,473 6 June 1996 (06.06.96) US (71) Applicant: ABBOTT LABORATORIES [US/US]; CHAD 0377/AP6D-2, 100 Abbott Park Road, Abbott Park, IL 60064-3500 (US). (72) Inventor: CERNEY, Michael, B.; 600 Buckingham Place, Libertyville, IL 60048 (US). (74) Agents: YASGER, Paul, D. et al.; Abbott Laboratories, CHAD 0377/AP6D-2, 100 Abbott Park Road, Abbott Park, IL 60064-3500 (US).			(81) Designated States: CA, JP, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 18 June 1998 (18.06.98)
(54) Title: NUCLEIC ACID PRIMERS AND PROBES FOR DETECTING <i>CHLAMYDIA PNEUMONIAE</i> (57) Abstract <p>Nucleic acid sequences that are useful for detecting <i>Chlamydia pneumoniae</i> are herein provided. These sequences can be used in hybridization assays or amplification based assays designed to detect the presence of <i>Chlamydia pneumoniae</i> in a test sample. Additionally, the sequences can be provided as part of a kit.</p>			

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/09673

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 587 331 A (GEN PROBE INC) 16 March 1994 see the whole document ---	1-4
X	EP 0 577 144 A (WASHINGTON RES FOUND) 5 January 1994 see examples 8,9 ---	1-4
X	CAMPBELL L ET AL: "Detection of Chlamydia pneumoniae by Polymerase Chain Reaction" JOURNAL OF CLINICAL MICROBIOLOGY, vol. 30, no. 2, February 1992, pages 434-39, XP000406741 see the whole document ---	1-9
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

23 March 1998

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

Int'l. Application No

PCT/US 97/09673

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>TJIHIE H ET AL: "Detection of Chlamydia pneumoniae using a general Chlamydia Polymerase Chain Reaction with species differentiation after hybridisation" JOURNAL OF MICROBIOLOGICAL METHODS, vol. 18, no. 2, September 1993, pages 137-150, XP000405961 see the whole document</p> <p style="text-align: center;">---</p>	1-9
X	<p>GAYDOS C ET AL: "Diagnostic utility of PCR-enzyme immunoassay, culture, and serology for detection of Chlamydia pneumoniae" JOURNAL OF CLINICAL MICROBIOLOGY, vol. 32, no. 4, April 1994, pages 903-5, XP002047218 see page 904, paragraph 1</p> <p style="text-align: center;">---</p>	1-9
X	<p>KHAN M ET AL: "A reverse transcriptase-PCR based assay for in-vitro susceptibility testing of Chlamydia pneumoniae" JOURNAL OF ANTIMICROBIAL CHEMOTHERAPY, vol. 37, April 1996, pages 677-85, XP002047219 see the whole document</p> <p style="text-align: center;">---</p>	1-9
Y	<p>PEREZ-MELGOSA M ET AL: "Isolation and characterization of a gene encoding a Chlamydia pneumoniae 76- kilodalton protein containing a species-specific epitope " INFECTION AND IMMUNITY, vol. 62, no. 3, March 1994, pages 880-86, XP002059939 cited in the application see the whole document</p> <p style="text-align: center;">---</p>	1-9
Y	<p>WO 94 29486 A (SALK INST FOR BIOLOGICAL STUDI) 22 December 1994 see page 45, line 10 - page 50, line 5</p> <p style="text-align: center;">-----</p>	1-9

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 97/09673

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ US 97/09673

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-9 searched partially in respect to SEQ ID NOS 2-7

Oligonucleotide probes or primers derived from the nucleic acid sequence encoding the 60kD outer membrane protein of *Chlamydia pneumoniae* for the detection of said microorganism in hybridisation assays or an amplification based assays

2. Claims: 1-9, partially with respect to SEQ ID NOS 9-14.

Oligonucleotide probes or primers derived from the nucleic acid sequence encoding the 76kD protein of *Chlamydia pneumoniae* for use in the detection of said microorganism in hybridisation assays or amplification based assays.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 97/09673

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0587331 A	16-03-94	US 5374718 A AU 5002993 A CA 2148468 A WO 9404549 A US 5683870 A	20-12-94 15-03-94 03-03-94 03-03-94 04-11-97
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